PESTICIDE EDUCATIONAL RESOURCES COLLABORATIVE

2nd Quarter Report: April 1, 2018 – June 30, 2018

Third Operational Year: 1/01/18 - 12/31/18

Cooperative Agreement # X8-83616301 University of California Davis Extension 1333 Research Park Drive Davis, CA 95618 530-757-8603 pesticideresources.org



PERC's Goal and Objective

The objective of the Pesticide Educational Resources Collaborative (PERC) is to implement the development, revision, or update of pesticide safety materials and resources that prevent and reduce pesticide risks to humans, communities, and ecosystems through education and outreach targeted toward agricultural workers, pesticide applicators, and others, through partners and stakeholders. This is complementary of the Environmental Protection Agency's Strategic Plan, Goal 4: Ensuring the Safety of Chemicals and Preventing Pollution. Reduce the risk and increase the safety of chemicals and prevent pollution at the source.

PERC is a cooperative agreement (#X8-83616301) between the U.S. Environmental Protection Agency's Office of Pesticide Programs and University of California Davis Extension, in collaboration with Oregon State University.

Submitted to:

U.S. Environmental Protection Agency Office of Pesticide Programs

Submitted on July 18, 2018 by:

Suzanne Forsyth
PERC Administrator and Co-PI

Program Highlights and Summary

PERC completed the English videos for training agricultural workers and pesticide handlers in June 2018. The Spanish videos will be completed in July 2018. Both languages are accompanied by closed caption versions. These videos have been highly requested and PERC is pleased to be able to provide this greatly needed resource.

PERC has begun the process to translate selected WPS resources into more languages, including Hmong, Haitian Creole, Karen, Vietnamese, Russian, Tagalog, and Mandarin. This aligns with PERC's objective to create and update pesticide safety materials to reduce risk to humans, communities, and ecosystems.

A location and time has been selected for the 2018 PERC In-Person Advisory Board Meeting. It will be held in Denver, CO on December 6 and 7. PERC looks forward to evaluating the resources of this year and determining the direction of projects in Year Four.

Objectives and Deliverables

Objective 1: To manage or implement the development, revision and updating of pesticide safety materials to advance the protection of humans, communities, and ecosystems from pesticide illness and injury.

Measure A: Engagement with Stakeholders

| Anticipated out- | | |
|-------------------|---|-------------------|
| comes for Q2 | Actual outcomes | Next quarter |
| Гаке advantage of | On April 17, Kaci Buhl presented the new PERC WPS | Take advantage of |

| Cornes for Q2 | Actual outcomes | next quarter |
|--|---|---|
| Take advantage of opportunities to engage additional stakeholders. | On April 17, Kaci Buhl presented the new PERC WPS Compliance Assistance Library to Oregon State University Extension Agents. | Take advantage of opportunities to engage additional |
| | Advisory Board members, Jolene Warnke-Roszel and Derrick Terada, attended the Western Regional Meeting on May 9th and presented current PERC materials and projects. | stakeholders. |
| | Advisory Board member, Charles Moses, attended the 2018 Advanced Enforcement Pesticide Inspector Regulatory Training (PIRT) in Savannah, GA on behalf of PERC and on June 10th conducted a needs assessment for the upcoming PERC WPS Inspector Pocket Guide project. | |
| Seek a time slot on the PACT workshop agenda or other national forums(s) to promote PERC materials and/or solicit needs information. | A PACT time slot has not been procured at this time, but PERC is finding other national forums to promote and solicit needs information. | Attend the PACT workshop (up to 8 AB members travel) |
| | Advisory Board members, Jolene Warnke-Roszel and Derrick Terada, attended the Western Regional Meeting on May 9th and presented current PERC materials and projects. | |
| | Advisory Board member, Charles Moses, attended the 2018 Advanced Enforcement Pesticide Inspector Regulatory Training (PIRT) in Savannah, GA on behalf of PERC and conducted a needs assessment for the upcoming PERC WPS Inspector Pocket Guide. | |
| Convene Advisory Board meetings in a way that builds community and comradery. | PERC communicated with the 2018 Advisory Board monthly, and the Co-Chairs facilitated introductions, information-sharing, and consideration of diverse perspectives. | Convene Advisory Board meetings in a way that builds community and comradery. |
| Induct Year 3 Advisory Board members | PERC's 2018 Advisory Board members were selected to represent key groups of stakeholders from different geographic regions and sectors. | None anticipated |

Measure B: Approval of Materials

| Anticipated of | out- |
|----------------|------|
|----------------|------|

| comes for Q2 | Actual outcomes | Next quarter |
|---|--|--|
| Evaluate all fast- track proposals within two weeks. | The translation of materials into other languages was approved by the Advisory Board and they responded to a poll on the most needed languages excluding Spanish. PERC is seeking to translate the WPS Flipchart and Central Posting Poster into Haitian Creole, Karen, Hmong, Vietnamese, Russian, Tagalog, and Mandarin. After completion of the online Train-the-Trainer Course, the PERC Advisory Board will explore the option of having the course translated and available in Spanish. | Evaluate all fast- track proposals within two weeks. |
| Finalize the list of green- lighted materials that will be produced in wave three | Using footage from the worker and handler training videos, PERC will focus on creating short videos, called WPS/Pesticide Safety 202. The WPS Inspector Pocket Guide solicitation was published and applications are being evaluated. The WPS Employer Handbook has been drafted and is currently being formatted in partnership with the Causeway Agency. Compliance and training for non-soil fumigation exams and manuals are in consideration. | None anticipated |

Measure C: Policies/Procedures

Anticipated out-

| comes for Q2 | Actual outcomes | Next quarter | |
|--|---|--|--|
| Track the number of new and/or updated PERC policies and procedures. | The completion of the Seed Treatment Manual necessitated a new policy regarding compliance and training resources as the market and needs are different from the WPS resources. | Track the number of new and/or updated PERC policies and procedures. | |

Measure D: Technical and Professional Experts

Anticipated out-

| comes for Q2 | Actual outcomes | Next quarter |
|--|--|----------------|
| Finalize agreements with Year Three Advisory Board members | Caroline Kirby has been on boarded as a compensated Advisory Board member. | Not applicable |

| Track the number and |
|------------------------|
| nature of SMEs |
| and/or production |
| professionals retained |
| through fast-track |
| procedures. |
| |

The English worker and handler training videos were completed with Janet Fults coordinating the project and Alexandra Lewis-Lorentz as the videographer.

Sandra McDonald completed her work as the Project Coordinator for the Seed Treatment Manual and Exam Bank.

Jennifer Weber and Cesar Asuaje completed translation of the Spanish Train-the-Trainer Manual coordinated by Amy Sullivan. The manual is in its final formatting stages with an anticipated publication date of July 2018.

Leveraging an existing EPA contract, PERC worked with the Causeway Agency to format the WPS Employer Handbook. Track the number and nature of SMEs and/or production professionals retained through fast-track procedures.

Measure E: Financial Monitoring of Contractors & Sub awardees

Anticipated out-

comes for Q2 Actual outcomes Next quarter

| Solicit quarterly and |
|-----------------------|
| annual summaries |
| from all sub-awards, |
| detailing their |
| accomplishments in |
| Year Three. |

Sub-awardee activity for OSU is reflected in all quarterly and annual reports and is included in the 'Other' category. Financial monitoring of OSU expenditures is tracked quarterly upon receipt and review of their invoices.

Solicit quarterly and annual summaries from all sub-awards, detailing their accomplishments in Year Three.

Measure F: Materials Development

Anticipated out-

| • | | |
|--------------|-----------------|--------------|
| comes for Q2 | Actual outcomes | Next quarter |

| Track the number of |
|----------------------------|
| new and/or updated |
| (completed) |
| (completed) educational |
| resources. |
| |

The English worker and handler training videos were completed in June 2018. The Spanish videos will be available in July 2018.

EPA is currently reviewing the WPS Employer Handbook, with an expected completion date of July 2018.

The Seed Treatment Manual and Exam Bank were completed and can be accessed through a request with EPA.

In April 2018, PERC promoted Pennsylvania State's new EPA-approved WPS training videos for workers and handlers: Safety in the Greenhouse: Understanding and Applying the Worker Protection Standard. While these are not PERC products, the resources fill a large gap in the training community. PERC collaborated with Penn state for many months with plans to be able to share

Track the number of new and/or updated (completed) educational resources.

| | these to a wider audience than Penn State was poised to do. PERC shared the video links through PERC's list serves, related associations, and also posted links on the PERC website under WPS resources. | |
|---|--|--|
| Track the number of Wave two materials that may be incomplete by June 30th when Wave Three will be initiated | The Spanish version of the worker and handler training videos will be available in July 2018. The English Train-the-Trainer Online Course is near completion and will be available in summer 2018. The Spanish Train-the-Trainer manual has been translated with an anticipated publication date in summer 2018. | |

Measure G: Planning Time-bound Materials Development

| Anticipated out- | | |
|--|---|--|
| comes for Q2 | Actual outcomes | Next quarter |
| Track the number of new and/or updated time-bound project plans. | No new project plans were implemented in Q2. A solicitation for the WPS Inspector Pocket Guide was published and applicants are currently being evaluated. | Track the number of new and/or updated time-bound project plans. |
| | | |

Objective 2: To enhance the capabilities of partners and stakeholders to develop and implement programs/activities that prevent and reduce pesticide risks to humans, communities, and ecosystems.

Measure A: Materials for Modification & Transfer

| Anticipated out- comes for Q2 | Actual outcomes | Next quarter |
|--|---|--|
| Make modifiable versions of new PERC materials available 100% of the time when produced in Adobe InDesign or the Microsoft Office Suite. | PERC materials are available in a format that can be modified by the individual to fit their particular region's needs. | Make modifiable versions of new PERC materials available 100% of the time when produced in Adobe InDesign or the Microsoft Office Suite. |

Measure B: Inventory of Resources

Anticipated out-

| ' | | | | | |
|--------------|-----------------------|---|-----------------------|--|--|
| comes for Q2 | | Actual outcomes | Next quarter | | |
| | Maintain inventory of | Ongoing management of training resources continues. | Maintain inventory of | | |
| | training resources on | | training resources on | | |
| | the PERC website by | | the PERC website by | | |
| | adding new items as | | adding new items as | | |
| | identified, removing | | identified, removing | | |
| | outdated items as | | outdated items as | | |
| | requested, and | | requested, and | | |
| | responding to | | responding to | | |
| | stakeholder needs. | | stakeholder needs. | | |
| | | | ' | | |

Measure C: PERC Website

Anticipated out-

| comes for Q2 | Actual outcomes | Next quarter |
|--------------------------|---|--------------------------|
| Maintain the PERC | Ongoing management of the PERC website continues. | Maintain the PERC |
| website, including the | | website, including the |
| status page (quarterly). | | status page (quarterly). |

Measure D: Planning and Reporting

Anticipated out-

| comes for Q2 | Actual outcomes | Next quarter |
|--|--|--|
| Submit quarterly reports within 30 days of the close of the quarter. | The first quarterly report for Year Three was submitted within 30 days of the close of the quarter on April 20, 2018. This quarterly report includes a summary of expenditures, purchases, and other fiscal activities; a side-by-side comparison of actual accomplishments vs. project accomplishments; proposed timelines/milestones. | Submit quarterly reports within 30 days of the close of the quarter. |

Measure E: Capacity Building

Anticipated out-

| comes for Q2 | Actual outcomes | Next quarter |
|--|--|--|
| Take advantage of efficient opportunities to engage additional stakeholders. | On April 17, Kaci Buhl presented the new PERC WPS Compliance Assistance Library to Oregon State University Extension Agents. Advisory Board members, Jolene Warnke-Roszel and Derrick Terada, attended the Western Regional Meeting on May 9th and presented current PERC materials and projects. | Take advantage of efficient opportunities to engage additional stakeholders. |

| | Advisory Board member, Charles Moses, attended the 2018 Advanced Enforcement Pesticide Inspector Regulatory Training (PIRT) in Savannah, GA on behalf of PERC and conducted a needs assessment for the upcoming PERC WPS Inspector Pocket Guide. | |
|---|--|---|
| Convene Advisory Board meetings in a way that builds community and comradery. | PERC communicated with the Advisory Board monthly, and the Co-Chairs facilitated introductions, information-sharing, and consideration of diverse perspectives. | Convene Advisory Board meetings in a way that builds community and comradery. |

Objective 3: To protect humans, communities and ecosystems from illness and injury caused by exposure to pesticides through education and outreach targeted toward agricultural workers, pesticide applicators, handlers, and others.

Measure A: Plain Language and Literacy Levels

| Anticipated out- comes for Q2 | Actual outcomes | Next quarter |
|---|--|--|
| 100% of materials should meet goals appropriate for the identified target audience, which may include trainers (12th grade reading level), trained professionals (10th grade reading level), the general public (8th grade reading level) or other types of user groups. Occasionally, the timesensitive nature of the resource may make reading-level modifications untenable. | The worker and handler training video scripts have been written to be easily understood, but still contain the necessary information. The process has been a collaborative effort between PERC Subject Matter Experts (SMEs) and the US EPA. The Seed Treatment Manual and Exam Bank have been written using resources from different states to be accessible to those pursuing professional training. Some aspects may exceed 10th grade reading level due to the technical nature of the material. The Spanish Train-the-Trainer Manual was translated to match the reading level of the English manual. | 100% of materials should meet goals appropriate for the identified target audience, which may include trainers (12th grade reading level), trained professionals (10th grade reading level), the general public (8th grade reading level) or other types of user groups. Occasionally, the time-sensitive nature of the resource may make reading-level modifications untenable. |

Measure B: Formats of Materials

Anticipated outcomes for Q2

Actual outcomes

Next quarter

PERC and its project teams will evaluate the need to duplicate any materials produced, considering the potential need for indoor/outdoor settings, language needs, and/or visual representations. If one of these duplications is large in scope, it would have to be prioritized (greenlighted) by the Advisory Board, and a project plan created.

PERC materials are available in a format that can be modified by the individual to fit their particular region's needs.

PERC and its project teams will evaluate the need to duplicate any materials produced, considering the potential need for indoor/outdoor settings, language needs, and/or visual representations. If one of these duplications is large in scope, it would have to be prioritized (green-lighted) by the Advisory Board, and a project plan created.

Measure C: Material Format and Availability

Anticipated outcomes for Q2

Actual outcomes

Next quarter

Summarize the items completed by PERC and through PERC collaborations, identifying the method of accessibility for stakeholders.

The Seed Treatment Manual and Exam Bank were completed this quarter. The exam bank can be accessed through a request with the EPA. The material is password protected and cannot be made available to the general public to maintain the integrity of the questions. A sample of the Seed Treatment Manual is currently available on the PERC website.

The English worker and handler training videos were completed in June 2018 and will be made available on the PERC website.

Summarize the items completed by PERC and through PERC collaborations, identifying the method of accessibility for stakeholders.

Measure D: Promotion of Materials

Anticipated out-

| comes for Q2 | Actual outcomes | Next quarter | | |
|--|--|--|--|--|
| Take advantage of efficient opportunities to engage additional stakeholders. | On April 17, Kaci Buhl presented the new PERC WPS Compliance Assistance Library to Oregon State University Extension Agents. | Take advantage of efficient opportunities to engage additional | | |
| | Advisory Board members, Jolene Warnke-Roszel and Derrick Terada, attended the Western Regional Meeting on May 9th and presented current PERC materials and projects. | stakeholders. | | |
| | Advisory Board member, Charles Moses, attended the 2018 Advanced Enforcement Pesticide Inspector Regulatory Training (PIRT) in Savannah, GA on behalf of PERC and conducted a needs assessment for the upcoming PERC WPS Inspector Pocket Guide. | | | |
| Advisory Board members should present and discuss PERC | Natalie Hoidal promoted PERC's Respirator Guide at inperson workshops April 4-6. She also promoted the Respirator Guide during a webinar on April 30. | Advisory Board members should present and discuss PERC | | |
| materials/website as they engage with their | Jolene Warnke-Roszel shared PERC resources during trainings on April 11-13 and May 1-2. | materials/website as they engage with | | |
| respective constituencies. | Jolene Warnke-Roszel and Derrick Terada, attended the Western Regional Meeting and presented current PERC materials and projects on May 9th. | their respective constituencies. | | |
| | On May 10th Betsy Buffington discussed the PERC website during a Worker/Handler WPS Training event in Boone, IA. | | | |
| | Charles Moses attended the 2018 Advanced Enforcement Pesticide Inspector Regulatory Training (PIRT) in Savannah, GA and conducted a needs assessment for the upcoming WPS Inspector Pocket Guide. | | | |
| Use an email distribution list or lists for individuals interested in WPS materials assembled and/or produced by PERC. | Ongoing management of PERC email lists continues. Current subscriptions to the PERC email lists include: percupdates: 261 perc-agemploy: 33 perc-handlers: 19 perc-workers: 18 perc-trainers: 70 | Use an email distribution list or lists for individuals interested in WPS materials assembled and/or produced by PERC. | | |
| | | | | |

Difficulties and Departures

A carryover project from Project year 2017, the translation of the PERC Train-the-Trainer (TTT) manual from English into Spanish was slow to catch up to speed. We had hoped to finish in Q3 but the current completion is early August. The same team was working on the TTT online course, which had a higher priority than the manual translation.

Sub-Awards, Contracts and Other Agreements

As part of its project proposal, UCDE named Oregon State University as a collaborator and therefore was not required to compete this sub-award further. Dr. Craig Marcus and Kaci Buhl now serve as co-Pls. Under Kaci's direction, OSU helped to create publications/documents identified through PERC needs assessments, wrote publications/documents on topics that fell within existing areas of expertise, built, housed and maintained the PERC website, and developed and maintained an inventory of existing pesticide safety materials. The total amount of this subaward in Project Year 2018 for 1/1/18 through 3/3/18 was \$32,796.16 and for 4/1/18 through 6/30/18 was 30,225.36. Total for Q1 and Q2 is \$63,021.52. The total for Project Year 2018 was budgeted at \$100,000 but was recently amended to \$125,000 based on the projects prioritized by the PERC Advisory Board for 2018 and OSU's ability to manage the projects more efficiently than hiring an outside vendor.

Quarterly Budget Expenditures – Project Year 2018

Table 1 - Quarter 2: April 1, 2018 - June 30, 2018

| Project Year 2018 | Qtr 2 | Budgeted | % Used |
|------------------------------------|-----------|-----------|-----------|
| | Actual | Annual | of Annual |
| A. Personnel | \$25,322 | \$100,697 | 25.15% |
| B. Fringe Benefits | \$12,254 | \$44,984 | 27.24% |
| C. Travel | \$0 | \$9,792 | 0% |
| D. Equipment | \$0 | \$0 | |
| E. Supplies | \$492 | \$743 | 66.25% |
| F. Contractual | \$55,520 | \$353,494 | 15.71% |
| G. Construction | \$0 | \$0 | |
| H. Other | \$1,409 | \$42,798 | 3.29% |
| H. Other (indirect exempt) | \$32,796 | \$116,239 | 28.21% |
| Total Direct Costs | \$127,795 | \$668,747 | 19.11% |
| Total Modified Direct Costs (MTDC) | \$94,999 | \$552,508 | 17.19% |
| Indirect Costs (based on MTDC) | \$47,500 | \$276,253 | 17.19% |
| | \$175,295 | \$945,000 | 18.55% |

Table 2 - Quarters 1 & 2: January 1, 2018 – June 30, 2018
Q1 Q2 Q3 Q4 Cumulative Budgeted % Used
Annual of
Annual

| | | | | | | Ailliuai |
|------------------------------------|----------|-----------|----------|-----|-----------|----------|
| Project Year 2018 | | | | | | |
| A. Personnel | \$24,290 | \$25,322 | \$49,63 | 12 | \$100,697 | 49.27% |
| B. Benefits | \$10,845 | \$12,254 | \$23,09 | 99 | \$44,984 | 51.35% |
| C. Travel | \$842 | \$0 | \$84 | 12 | \$9,792 | 8.60% |
| D. Equipment | \$0 | \$0 | | \$0 | \$0 | |
| E. Supplies | \$39 | \$493 | \$53 | 31 | \$743 | 71.49% |
| F. Contractual | \$16,599 | \$55,520 | \$72,12 | 20 | \$353,494 | 20.40% |
| G. Construction | \$0 | \$0 | | \$0 | \$0 | |
| H. Other | \$11,454 | \$1,410 | \$12,86 | 64 | \$42,798 | 30.06% |
| H. Other (indirect exempt) | \$0 | \$32,796 | \$32,79 | 96 | \$116,239 | 28.21% |
| Total Direct Costs | \$64,069 | \$127,795 | \$191,86 | 54 | \$668,747 | 28.69% |
| Total Modified Direct Costs (MTDC) | \$64,060 | \$94,999 | \$159,09 | 59 | \$552,508 | 28.79% |
| I. Indirect Costs | \$32,034 | \$47,500 | \$79,53 | 34 | \$276,253 | 28.79% |
| Total Expenses: | \$96,103 | \$175,295 | \$271,39 | 98 | \$945,000 | 28.72% |

Pesticide Educational Resources Collaborative

Table 1 reports resources used during the second quarter of Project Year 2018 are \$175,295, representing 18.55% of the annual budget.

Table 2 reports the cumulative for Q1 and Q2 is \$271,398, representing approximately 28.72% of the total annual budget of \$945,000. UCDE expects a few remaining Q2 items to post in Q3. These additional direct expenses will be reflected in the next quarterly report. Lastly, UCDE will finalize the total of the unexpected funds from Project Year 2017 to carryover to Project Year 2018 and will submit a revised budget in the coming months.